

PATENT

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A computer-implemented method for effecting, via a computer network, substitution of at least one ordered item of at least one customer order for on-line shopping, the method comprising:

receiving, via the computer network, at least one customer order placed by a customer through a computing device, the at least one customer order including more than one ordered item, with at least one ordered item having an ordered quantity larger than one, the customer order being a current order of the customer, including delivery time information regarding the order;

analyzing a selected portion of the received customer order taking into consideration at least another customer order to determine whether at least one item of inventory has been oversold, said analyzing being performed prior to the delivery of at least one ordered item of the received customer order and at least one ordered item of the at least another customer order;

identifying an ordered item in the received customer order relating to an oversold item; and

upon identifying the ordered item relating to the oversold item, automatically substituting, based upon information regarding at least one substitution preference stored in a storage medium, at least one substitute item for the identified ordered item in the received customer order, the at least one substitution preference being provided by the customer,

wherein the substituting depends on a ratio rule for substituting the substitute item for the identified ordered item.

wherein the quantity of the substitute item to be substituted for a quantity of the identified ordered item depends on the ratio rule.

wherein the customer is allowed to modify the at least one substitution preference during the current order, and

**PATENT**

wherein the customer is allowed to view the image of at least one item through the computing device to support the customer in placing the current order.

2. (Previously presented) The method of claim 1 wherein said analyzing includes comparing analyzed order data to inventory data to determine whether at least one item of inventory has been oversold.

3. (Previously presented) The method of claim 2 wherein said comparing occurs before fulfillment of said portion of the received customer order.

4. (Previously presented) The method of claim 1 wherein said substituting includes selecting a desired ordered item corresponding to the oversold item.

5. (Previously presented) The method of claim 1 wherein automatically substituting also depends on minimizing the number of order substitutions to be performed for each customer order.

6. (Previously presented) The method of claim 1 wherein automatically substituting also depends on selecting for substitution an ordered item over another ordered item based on the corresponding quantity levels of the ordered item and the another ordered item.

7. (Previously presented) The method of claim 1 wherein the ordered item substitution occurs at a time of fulfillment of said portion of the received customer order.

8. (Previously presented) The method of claim 7 wherein the ordered item substitution is performed at a time of fulfilling an order without intervention from a human operator.

9. (Previously presented) The method of claim 1 wherein the ordered item substitution is performed by an automated computer process.

**PATENT**

10. (Previously presented) The method claim 1 wherein automatically substituting also depends on a sorted list of substitute products from which the substitute item is chosen.

11. (Cancelled)

12. (Previously presented) The method of claim 1 further comprising comparing the identified ordered item with at least another identified ordered item in another customer order related to the oversold item based upon the quantity value associated with each of the identified ordered items.

13. (Previously presented) The method of claim 1 further comprising comparing the identified ordered item with at least another identified ordered item in another customer order related to the oversold item based upon a number related to substitution already implemented in each customer order associated with the identified ordered item.

14. (Original) The method of claim 1 wherein said analyzing includes aggregating a selected portion of the received customer orders to determine whether at least one item of inventory has been oversold.

15. (Currently Amended) A computer program product for effecting, via a computer network, substitution of at least one ordered item of at least one customer order for on-line shopping, the computer program product comprising:

a computer usable medium having computer readable code embodied therein, the computer readable code comprising:

computer code for receiving, via the computer network, at least one customer order placed by a customer through a computing device, the at least one customer order including more than one ordered item, with at least one ordered item having an ordered

## PATENT

quantity larger than one the customer order being a current order of the customer, including delivery time information regarding the order;

computer code for analyzing at least a portion of the received customer order taking into consideration at least another customer order to determine whether at least one item of inventory has been oversold, said analyzing being performed prior to the delivery of at least one ordered item of the received customer order and at least one ordered item of the at least another customer order;

computer code for identifying an ordered item in the received customer order relating to an oversold item; and

computer code for automatically substituting, based upon information regarding at least one substitution preference stored in a storage medium, at least one substitute item for the identified ordered item in the received customer order upon identifying the ordered item relating to the oversold item, the at least one substitution preference being provided by the customer,

wherein the substituting depends on a ratio rule for substituting the substitute item for the identified ordered item,

wherein the quantity of the substitute item to be substituted for a quantity of the identified ordered item depends on the ratio rule,

wherein the customer is allowed to modify the at least one substitution preference during the current order, and

wherein the customer is allowed to view the image of at least one item through the computing device to support the customer in placing the current order.

16. (Previously presented) The computer program product of claim 15 wherein automatically substituting also depends on minimizing the number of order substitutions performed for each customer order.

17. (Previously presented) The computer program product of claim 15 wherein automatically substituting also depends on selecting for substitution an ordered item over another ordered item based on the corresponding quantity levels of the ordered item and the another ordered item.

## PATENT

18. (Original) The computer program product of claim 15 wherein said ordered item substitution is performed by an automated computer process.

19. (Previously presented) The computer program product of claim 15 wherein said computer code for substituting includes:

computer code for determining a first preferred substitution item for the identified item; and

computer code for determining whether a sufficient quantity of the first preferred substitution item is available to be substituted for the identified item.

20. (Previously presented) The computer program product of claim 19 further comprising computer code for determining a second preferred substitution item for the identified item in response to a determination that there is an insufficient quantity of the first preferred substitution item available to be substituted for the identified item.

21. (Previously presented) The computer program product of claim 15 wherein said computer code for substituting includes computer code for partially substituting an ordered item for the identified item, said partial substitution code including:

computer code for reducing a quantity of the ordered item; and

computer code for adding a specified quantity of a new item in the respective customer order.

22. (Previously presented) The computer program product of claim 15 wherein said computer code for substituting includes computer code for fully substituting an ordered item for the identified item, said full substitution including:

computer code for reducing a quantity of the ordered item to zero; and

computer code for adding a specified quantity of a new item in the respective customer order.

**PATENT**

23. (Currently Amended) A system for effecting, via a computer network, substitution of at least one ordered item of at least one customer order for on-line shopping, the system comprising:

at least one central processing unit;

at least one interface configured or designed to receive at least one customer order placed by a customer through a computing device, via the computer network, the at least one customer order including more than one ordered item, with at least one ordered item having an ordered quantity larger than one, the customer order being a current order of the customer, including delivery time information regarding the order; and

memory;

wherein the processing unit is configured or designed to store in the memory customer order information and information regarding at least one substitution preference relating to at least one item substitution rule;

said system being configured or designed to analyze at least a portion of the received customer order taking into consideration at least another customer order to determine whether at least one item of inventory has been oversold, said analyzing being performed prior to the delivery of at least one ordered item of the received customer order and at least one ordered item of the at least another customer order;

said system being further configured or designed to identify an ordered item in the received customer order relating to an oversold item; and

said system being further configured or designed to automatically substitute, based upon information regarding said at least one substitution preference stored in the memory, at least one substitute item for the identified ordered item in the received customer order upon identifying the ordered item relating to the oversold item, the at least one substitution preference being provided by the customer,

wherein the automatic substitution depends on a ratio rule for substituting the substitute item for the identified ordered item.

wherein the quantity of the substitute item to be substituted for a quantity of the identified ordered item depends on the ratio rule.

wherein the customer is allowed to modify the at least one substitution preference during the current order, and

**PATENT**

wherein the at least one interface is further configured or designed to show the image of at least one item through to support the customer in placing the current order.

24. (Previously presented) The system of claim 23 wherein to automatically substitute also depends on minimizing the number of order substitutions performed for each customer order.

25. (Previously presented) The system of claim 23 wherein to automatically substitute also depends on selecting for substitution an ordered item over another ordered item based on the corresponding quantity levels of the ordered item and the another ordered item.

26. (Original) The system of claim 23 wherein said ordered item substitution is performed by an automated computer process.

27. (Previously presented) The system of claim 23 wherein the system is further configured or designed to compare the identified ordered item with at least another identified ordered item in another customer order related to the oversold item based upon the quantity value associated with each of the identified ordered items.

28. (Previously presented) The system of claim 23 wherein the system is further configured or designed to compare the identified ordered item with at least another identified ordered item in another customer order related to the oversold item based upon a number related to substitution already implemented in each customer order associated with the identified ordered item.

29. (Currently Amended) A computer-implemented method for effecting, via a computer network, substitution of at least one ordered item of at least one customer order for on-line shopping, the method comprising:

receiving, via the computer network, at least one customer order placed by a customer through a computing device, the at least one customer order including more

**PATENT**

than one ordered item, with at least one ordered item having an ordered quantity larger than one, the customer order being a current order of the customer, including delivery time information regarding the order;

analyzing at least a portion of the received customer order with at least another customer order to determine whether at least one item of inventory has been oversold, said analyzing being performed prior to the delivery of at least one ordered item of the received customer order and at least one ordered item of the at least another customer order;

identifying an ordered item in the received customer order relating to an oversold item; and

upon identifying the ordered item relating to the oversold item, automatically substituting, based upon information regarding at least one substitution preference stored in a storage medium, at least one substitute item for the identified ordered item in the received customer order, the at least one substitution preference being provided by the customer;

wherein said substituting includes:

accessing said at least one substitution preference to determine a first preferred substitution item for the identified item; and

determining whether a sufficient quantity of the first preferred substitution item is available to be substituted for the identified item,

wherein said substituting depends on a ratio rule for substituting the first preferred substitute item for the identified item,

wherein the quantity of the first preferred substitute item to be substituted for a quantity of the identified item depends on the ratio rule,

wherein the customer is allowed to modify the at least one substitution preference during the current order, and

wherein the customer is allowed to view the image of at least one item through the computing device to support the customer in placing the current order.

30. (Previously presented) The method of claim 29 further comprising determining a second preferred substitution item for the identified item in response to a

**PATENT**

determination that there is an insufficient quantity of the first preferred substitution item available to be substituted for the identified item.

31. (Previously presented) The method of claim 29 wherein said substituting includes partially substituting an ordered item for the identified item, said partial substitution including:

reducing a quantity of the ordered item; and  
adding a specified quantity of a new item in the respective customer order.

32. (Previously presented) The method of claim 29 wherein said substituting includes fully substituting an ordered item for the identified item, said full substitution including:

reducing a quantity of the ordered item to zero; and  
adding a specified quantity of a new item in the respective customer order.

33. (Cancelled)

34. (Currently Amended) A computer-implemented method for effecting, via a computer network, substitution of at least one ordered item of at least one customer order for on-line shopping, the method comprising:

receiving, via the computer network, a plurality of customer orders, with at least one customer order including more than one ordered item placed by a customer through a computing device, with at least one ordered item having an ordered quantity larger than one for a particular item of merchandise, the customer order being a current order of the customer, including delivery time information regarding the order;

aggregating a selected portion of the plurality of customer orders, wherein the aggregated customer orders include a plurality of ordered items;

analyzing the plurality of ordered items, which include the at least one ordered item, to determine whether at least one item of merchandise has been oversold;

upon determining that at least one item has been oversold, automatically modifying at least a portion of the received customer orders by substituting alternate

## PATENT

merchandise for ordered merchandise which has been identified as being oversold, where the substitution of merchandise items is implemented using information regarding at least one substitution preference stored in a storage medium, the at least one substitution preference being provided by the customer; and

fulfilling the modified customer orders,  
wherein the modifying depends on a ratio rule for substituting the alternate merchandise for the ordered merchandise that has been identified as being oversold,  
wherein the quantity of the alternate merchandise to be substituted for a quantity of the ordered merchandise that has been identified as being oversold, depends on the ratio rule,

wherein the customer is allowed to modify the at least one substitution preference during the current order, and

wherein the customer is allowed to view the image of at least one item through the computing device to support the customer in placing the current order.

35. (Original) The method of claim 34 wherein said substitution is performed automatically, without intervention by a human.

36. (Cancelled).

37. (Previously presented) A computer-implemented method as recited in claim 1, wherein the at least one substitution preference is a general substitution preference of the customer.

38. (Previously presented) A computer-implemented method as recited in claim 1, wherein the at least one substitution preference is a specific substitution preference of the customer regarding an item.

39. (Previously presented) A computer-implemented method as recited in claim 1, wherein the at least one substitution preference is previously provided by the customer before the current order.